

Base station 101 receives a signal resulting from multiplexing a communication signal spread using a signal-specific spreading code and sent by mobile station apparatus 110 and a CAL signal spread using a signal-specific spreading code and sent for each unit frame for a predetermined time by CAL radio signal generator 120 in a same frequency band. A/D conversion/despreading section 106 and A/D conversion/despreading section 107 extract the above-described communication signal and CAL signal from the received signal. Calibration processing section 108 carries out calibration processing using the above-described CAL signal in parallel with a communication using the above-described communication signal. Array combining/signal processing section 109 carries out demodulation processing on the above-described communication signal using the calibration processing result.